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## CHAPTER 7

# Scales

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### Abstract

This contribution will focus on the politics of scales and their relevance for sustainability thinking and political action. Scales offer diverse points of observation on socio-environmental interactions and power relations. They have been traditionally conceived, by positivist science, as spatial relational levels that vary from the local to the global dimensions, in hierarchical order. More recently, poststructural interpretations have studied spatial phenomena and territoriality through more complex and dynamic articulations—in terms of multiscale, processual rescaling, ideological constructions, and contextual pathways for democratic, just, and sustainable transformations. This chapter focuses on two cases:

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a) on rescaling strategies deployed by Indigenous organizations in Ecuador in relation to the central powers to affirm the pluri-national identity of the state; and b) on a confrontation between standard scales produced by scientific practices in natural conservation and creation of a natural park and kinship scale based on the notion of ancestral lands, *tanindrazana*, of the Tsimihety, the main ethnic group in rural Northeast Madagascar.

## Introduction

This contribution will focus on the politics of scales and their relevance for sustainability thinking and political action. The politics of scales inform sustainability science to focus carefully on peoples' institutions, territories, and territorialities as contingent levels of power interactions. Scales have been traditionally conceived, by positivist science, as spatial relational levels that vary from the local to the global dimensions, passing through intermediate levels such as the regional, national, and macro-regional scales produced by multiple practices and processes. Scales identify operational areas involving human and non-human relations across space, making special assemblages visible through artefacts, living beings, infrastructures, organizations, and symbolic meanings. More recent studies on feminist geopolitics (e.g. Smith et al. 2015) have described human bodies as smaller-scale forms of territory where agency, struggles, and violence occur. Moreover, scales have been defined not as ontological realities but as constructs: as dialectic, social, and political processes intersecting space (Delaney and Leitner 1997) and producing space (Swyngedouw and Heynen 2005). Therefore, a focus on scales is relevant to sustainability politics, inasmuch as it offers interpretations of narratives of power over people, spaces, and territories.

The discussion about scales allows us to focus methodologically on how things change across relational spaces, and to what effect, as they are rescaled by actors and institutions (Carr and Lempert 2016). The state scale has long been predominant even in contexts where state formations are characterized by multiple ethnicities, and as the level of operational power entitled to address

global challenges (e.g., climate change agreements and state-based implementation politics), although these would need diverse scales of action. Since scales reveal the operational settings of various actors, observing scales as processual and contingent levels of power interactions makes visible the relation between different institutional levels and social constituencies, and their rescaling configurations. The theme of this chapter contributes to the topic of the book by paying attention to Indigenous practices of scaling that are relevant in the making of the Ecuadorian nation-state and in creating people's own social orders, such as ancestral lands—as in the case of Tsimihety in Madagascar. The attention on Indigenous and situated scale making highlights different world views and knowledge about what people consider sustainable. The focus calls attention to power relations in planning and practices of sustainable projects and enlightens us of forms and practices of Indigenous politics.

In this chapter, we explore scaling in concrete situated practices in Ecuador and in Madagascar. First, we explore the concept of scale theoretically as a socially constructed and always ideologically and epistemologically produced concept. We continue to highlight, from these perspectives of scales: a) rescaling strategies deployed by Indigenous organizations in Ecuador in relation to the state powers; and b) a confrontation between standard scales produced by scientific practices in natural conservation and kinship scale of the Tsimihety, the main Indigenous group in rural Northeast Madagascar. Interpretations of multiscalarity, processual rescaling, and noticing ideologies of scale making provide conceptual and methodological contextualization for democratic, just, and sustainable transformations, and encourage acknowledgement that the same metaphors, such as ancestral land, can be used in various ways by different actors in different historical situations.

### **Theory: Scales as Hierarchical Ontology or Ideological Constructions?**

Scale is one of geography's foundational concepts, but its meaning has recently developed further under the influence of

constructivist approaches in social sciences. For a long time, scale has been understood in relation to maps, as a mathematical relation between objects and cartographic representations in respect to the authority of quantification that sees calculation as a way of knowledge (Carr and Lempert 2016). In discursive terms, scale has been examined at different levels of analysis in which political processes are investigated—for example, local, urban, regional, national, and global—and organized along hierarchical orders that assign greater political and economic relevance to these levels in decreasing order from global to local. Constructivist approaches have challenged the idea of localities, regions, nations, and so on as pre-constituted objects. In other words, instead of considering the ‘ontological system of scales’ as a fix, analysts should look at their fluidity, multiplicity, and socially constructed nature, as Moore (2008) stated in his fundamental paper on scale politics as analytical concepts and categories of practice. As contingent social constructions, the observation of their processual practice allows the political constructions of scale to emerge (Delaney and Leitner 1997). Moreover, various scholars have contested the scaled hierarchies for creating ‘dubious labels or metaphorical tropes—“local”= static and authentic, “global”= dynamic and produced, etc.—to scales, and the places, actors and processes they link to them’ (Moore 2008: 212).

Clearly, scaling is not the effect of a neutral recognition but is a process imbued with ideology (see e.g. Gal and Irvine 2019). The specific scale positioning of certain actors is the contingent outcome of a process involving power relations over specific resources, areas, and peoples, and the ranking is reinforced through the institutionalization of administrative orders. As an example, the state is commonly conceived as corresponding to the national scale and to hold greater power than other regional or local administrative scales.

Feminist scholars condemn the positioning of home or the body at the lowest scale levels, especially since feminine bodies are confined within domestic spaces of householding and caretaking, considered non-political (e.g. Gal 2002); they argue that this is an

expression of oppressive patriarchy and that domestic subordination and violence are specific materializations of broader political structures and phenomena (Pain 2015). Critical scale discussions are also expressed by postcolonial scholars against the confinement of Southern studies as *local knowledge*, compared to the Western knowledge that is seen as *universal*. Against this heritage of imperialism, Chakrabarty (2000) calls for ‘provincializing Europe’, meaning that Europe can no longer be considered the centre of a global colonial order but needs repositioning at a lower, decentralized level together with a multitude of diverse sociospatial units. Ashish Kothari (2019) claims a necessary recognition of pluriversal knowledges and proposes a solidarity network and strategic alliance of radical alternatives to the dominant regime founded on capitalist, patriarchal, racist, statist, and anthropocentric forces.

Moore (2008) considers scales as having both conceptual functions and practical forms of political action. The former function is empowered by national and international statistics and by the consideration of local realities as pre-defined by the global positioning of the state in which they are located (e.g. in the international ranking based on GDP). No matter how global capital dominates pervasively worldwide, the international order is still politically defined as an assemblage of states, most commonly considered nation-states. Contrary to some propaganda, nation-states are not ontologically given, but contingent formations resulting from the political practice of nation making and state making, based on ideology and performed via infrastructural and symbolic efforts. The concept of rescaling, or scale-jumping (Smith 1992), defines the relationship between scale and politics as a struggle performed by certain groups to improve their political and economic positioning within a scale hierarchy. For Moore (2008), the hierarchical ontological model is politically regressive as it unhelpfully reproduces sociospatial inequalities and suffocates possibilities of resistance. In the way this model naturalizes the subordination of local administrative and other social assemblage levels to the state levels, it is used to oppose quests for political autonomy. This

same critique (of naturalized hierarchy and subordination) can be addressed to the *matryoshka* metaphor, where distinct arenas of space (containers) are mutual relations of containment, and whose relations are based upon a nesting hierarchy of ‘enveloping/enveloped’, rather than verticality (Herod 2008). Moore recalls different models such as the flat ontology of the sociospatial units proposed by the actor-network theory (ANT) and their network connections that support changes, while Ash’s post-phenomenological approach (Ash 2019) has deepened the conceptualization of space as human-world relations in their spatial appearance.

The recognition of diverse ontologies, as in mutual relations functionally delinked from other state-institutional orders, strengthens their political consistency. We will consider, as an example of flat ontology or flattened relations on an equal plane (Anderson et al. 2012), the scale politics used by the Indigenous peoples of Ecuador to decolonize the structural inequalities within the state. Moreover, we suggest looking at scales as epistemological, rather than solely ontological, realities. In another sense, scales are strategic configurations by which social groups (ethnic groups, territorial movements, political constituencies, etc.) find and communicate their common histories. As already anticipated, national scales as homogeneous identity levels are the most commonly used for political scopes.

The following sections will present two case studies based in two community areas, one in Ecuadorian Amazonia and one in Northeast Madagascar, where distinctive politics of scale are demonstrated. The two cases are situated, respectively, within the disciplinary areas of political geography and anthropology.

### **Rescaling of Plurinationalism in Ecuador as a Decolonial Strategy**

This section presents examples of scale politics activated by Indigenous organizations of the Ecuadorian Amazonia, aimed at their territorial defence through the affirmation of the plurinational identity of the Ecuadorian state. Ecuador is a pluri-ethnic country

composed of 14 Indigenous nationalities and other ethnic groups. Their operational struggles have taken different forms: political organization, territorial claims, educational reforms, and language recognition, among other issues. In all these various areas, political activists within the Indigenous organizations have adopted *scale-jumping* and *network* strategies.

The independence of Ecuador (1821) did not mark a profound change in the sociopolitical, economic, and cultural situation of the majority of the peoples living in the country for a long time. The state remained ethnically divided, with the white-mestizos inheriting the ruling functions from their colonial predecessors, and maintaining the structures of injustice that discriminated against the rest of society. The policy of the Ecuadorian government toward Indigenous peoples was, throughout most of the twentieth century, one of cultural assimilation into what was called the 'national life' and of political and economic marginalization. The rural areas and Amazonian peripheries have been valued only as a reserve of natural resources, and the economy has invested in mining, oil, and forest extractivist projects. Territorial claims, environmental protection, and political self-determination are at the core of the struggles of Indigenous organizations and political movements. Against them, governmental policies, besides military occupation in ancestral forests, promoted the migration of many settlers from the densely populated highland and coastal regions to the Amazon, thus dispossessing the Indigenous peoples from much of their traditional lands. For the central government, the conservation of Indigenous territories was of marginal interest, less valuable than the state-project based on economic growth (Ortiz-T. 2016). Within its nationalist and modernist vision, cultural diversity was seen as a backward attribute; on the contrary, formal schooling was used as a powerful vehicle of national assimilation that led to a rapid language shift from Amerindian languages to Spanish (King and Haboud 2002).

In the 1980s, Indigenous communities began *escalating* their political strategy into national formations that finally enabled them to relate as peers to the Ecuadorian state. This strategy has been



enacted by Indigenous leaders through political relations with national leftist parties, and with NGOs and international organizations, based on the consideration that their local struggles were of global concern. Their politics of scale was multiform and combined local ancestral territoriality with national mobilization and international advocacy. Moreover, strategic rescaling was enacted at least through three strategic modalities: 1) cultural-ideological, 2) political-administrative, and 3) structural-constitutional.

The first modality has proceeded via recognition of some ethnic groups as 'nationalities', when they could claim specific ancestral territories, cultures, and languages. The national language passed through projects of language reconstruction: for example, with the creation, in 1981, of a standardized written Kichwa language, *Kichwa unificado*, with the purpose of increasing literacy within the Kichwa communities of the Andes and Amazonian regions. This project has supported the maintenance and revitalization of the language, although it also engendered a debate on its authenticity and the risk of losing its diversity. Another example is the UNESCO contribution to the revitalization of the Sápára language from extinction (UNESCO 2008).

The second modality, political-administrative, was performed through the creation of national confederations of Indigenous and ethnic organizations: at the regional levels (Confederation of Indigenous Nationalities of the Ecuadorian Amazon: CONFENIAE, Confederation of Peoples of Kichwa Nationality of the Andes: ECUARUNARI, and Confederación de Nacionalidades y Pueblos Indígenas de la Costa Ecuatoriana: CONAICE); and then at the national level, through the Confederation of the Indigenous Nationalities of Ecuador (CONAIE). While the collaboration of local organizations is a *horizontal-network* strategy, the CONAIE umbrella represents a *matryoshka* formation of spatial, ethnic, and political containers. Other, more strictly political formations, such as the Organization of the Indigenous Peoples of Pastaza (OPIP), have added complexity to the institutionalization arena: OPIP was important for having organized a historical march of Indigenous peoples in 1992, from Pastaza to Quito, for the

recognition of their territorial rights, and for being present in national elections and Parliament (Ortiz-T. 2016). However, CONAIE has maintained the most influential role, including in the recent national strike of October 2019.

Finally, the structural-constitutional strategy is visible in the process leading to the 2008 Constitution, in which CONAIE was able to negotiate the declaration of Ecuador as an intercultural and plurinational state with the government. Respecting this principle would involve a deeper restructuring of the state in decolonial terms, recognizing equal rights to all the diverse ethnic groups living in the country, and self-determination in the national territories. Interculturalism is also a fundamental principle in the quest of decolonizing the formal state schooling, as opposed to cultural assimilation; it implies the autonomy of district units and place-based education, carried out at the local level, as the principles of *buen vivir* would suggest. However, CONAIE and all activists claim that this principle is still on paper, and that the pathways of recognition have moved backward since 2008 because of deep political conflicts caused by a financial crisis and a re-acceleration of state-led extractivism (see Chapter 17 on *Extractivisms* in this book).

### Standardized and Kinship Scales in Rural Northeast Madagascar

This short ethnographical comparison will illustrate people's engagement on an ancestral land whose scaling processes cannot be reduced into single hegemonic relations—for example, local—global or scales of nature, such as vegetational or elevational zones produced by scientific practices. In Northeast Madagascar, the 55,500-hectare Marojejy National Park was established in 1998 in order to protect Madagascar's rare and endemic species and make environmental conservation efforts economically sustainable. The park was initiated by the World Wildlife Fund (WWF) and funded by development and conservation agencies such as Kreditanstalt für Wiederaufbau (KfW), a German invest-

ment bank, and the Center for Biodiversity and Conservation of American Museum of Natural History (Goodman 2000: viii–1, Kull 2013: 146). The park area, where only paying visitors could enter, was determined by the results of a scientific inventory conducted by 25 WWF experts from Andapa and Antananarivo. People, mainly Tsimihety ethnicity, living in the vicinity of the park were recruited as assistants and porters. The scientific group carried out large-scale biological and elevational inventories and used geographical positioning systems, discussions with locals and various mapping techniques at different sites of investigation (Goodman 2000). With concepts such as topography, elevation, and temperature, the enquiry implied that the scale-making project favoured a universalized standardization system in which different places or areas could be compared based on their diversity and rareness of species that inhabited the area, determined by expert knowledge based on the natural facts of experts and scientists. This is the stabilized, standardized and objectified scale that tends to erase different knowledge and perspectives (Ellen and Harris 2000; Gal and Irvine 2019). The people living in the vicinity of the park were not sure what was going on as it was being established. Further, as the park area was enclosed and only people paying fees or working for the park could enter the area, local people were puzzled as to what the park was about.

Biodiversity discourse can be used as a resource for environmental politics, and it is one way of encompassing the local within the global, with its imperial gaze emphasizing a Euro-American nature (Sodikoff 2012: 88; Tsing 2005: 93–4, 158). Placing Madagascar's nature on a global scale allowed the Malagasy state to attract transnational and bilateral funders who provided millions of dollars and euros through bi- and multi-lateral development and environmental conservation agencies (Kull 2014: 146). In eight years (2003–2010), Madagascar, following the guidelines of the United Nations and the IUCN, Madagascar tripled the area of environmental conservation and met the 10 percent requirement of areas under protection (Corson 2014: 193).

The Tsimihety swidden and irrigation farmers, who also cultivate vanilla and coffee, have historically moved around the inland of Northeast Madagascar in order to flee the enforcement of state policies. They have maintained their autonomy by cultivating land, building houses, and establishing clan tombs. According to one narrative, a man went to a village to visit his sister; the sister told the brother to clear some forest (*atiala*) in order to cultivate land (*tany*). In the village, the man met a woman and they had had four children together. When he died, his family buried his body in the family tomb located in another village further west from the village in which he had previously lived.

When people move to a new site, they do not lose their ties to previous places. After they have successfully established fields and houses and maintained good connections with their relatives by visiting and remembering each other, a certain place becomes imaginable as a branch of the kin group and their ancestral land (*tanindrazana*) (see also Bloch 1971; Keller 2008; Lambek and Walsh 1997: 317). The scale of ancestral land was not homogeneously occupied territory but expanded through relations with people in certain places. This required an understanding not only of physical geography but also of kinship relations: how they were created, maintained, and possibly broken. One's relations with one's ancestral land became significant in proving one's land ownership. Here the scale is not merely a strategy but a life that is lived in realities produced in political, historical, and economic processes and dynamics.

The metaphor of the 'land of ancestors' became relevant in national politics as it was used to mobilize people against the former president, who wanted to rearrange the use and ownership of the land by leasing 1.3 million hectares to the South Korean company Daewoo for 99 years. The company wanted to cultivate palm oil and maize for sale and South Korean domestic consumption. In the coup d'état in 2009, the opposition used the metaphor of 'ancestral land' and, ultimately, the project was cancelled (Vinciguerra 2013). With these acts, the opposition 'nested' all different ancestral lands into the Malagasy state and nationality.

As can be seen, a researcher must be aware of the similarities and differences when different actors refer to and use the notion of ancestral land.

## Conclusion

Politics of scales inform sustainability science to focus carefully on peoples, institutions, territories, and territorialities as contingent levels of power interactions. Paying intensive attention to specific contexts of political agency allows us to observe that scalability and scale making are, in the end, world-making projects in which people scale, organize, interpret, orient, and act in their worlds (Carr and Lempert 2016; Tsing 2012: 505). These cases from Ecuador and Madagascar inform discussions on sustainability, promising liveable futures for all by demonstrating the strategies, practices, and negotiations of different people in historical and ongoing structures of political economy, power, and politics.

Sustainability studies, as a scientific effort, should pay attention to the scales on which it operates and what knowledge and scientific practices those scales enable and, conversely, hinder. As a multidisciplinary practice, sustainability science requires careful discussion on what scales promote its aim to create a more liveable world for as many as possible: humans, animals, plants, and earth beings, in diverse assemblages, locations, and processes.

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